



Indian Standard

(Reaffirmed 2002)

(Reaffirmed 2012)

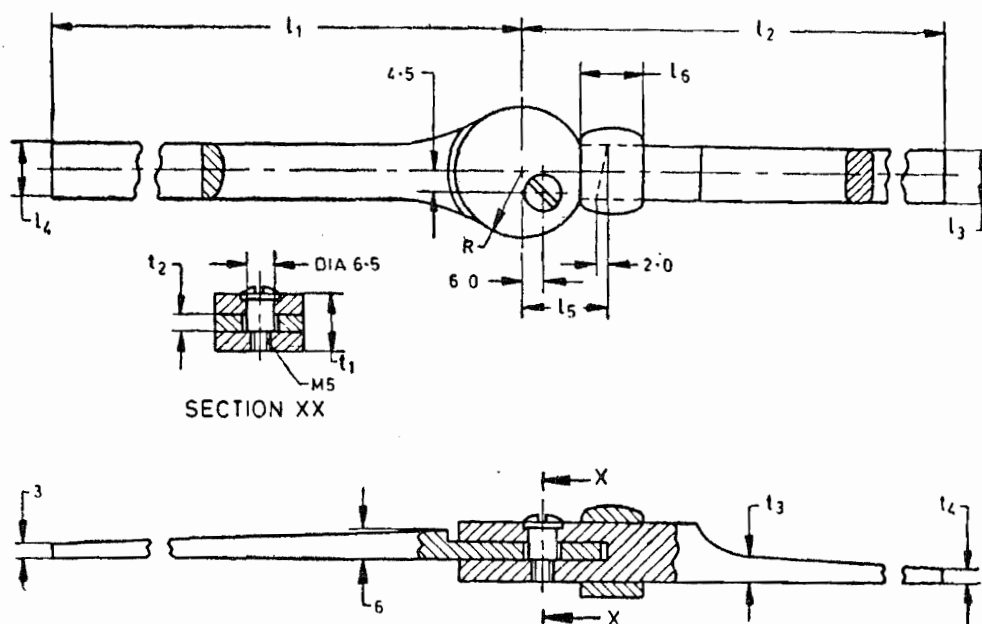
(Reaffirmed 2017)

# SPECIFICATION FOR KNEE JOINT WITH LOCK FOR ORTHOSIS

(First Revision)

**1. Scope** — Prescribes dimensional and other requirements for knee joint with lock for steel orthopaedic calipers and braces.

**2. Shape and Dimensions** — As shown in Fig. 1 and 2.



Size	$l_1$	$l_2$	$l_3$	$l_4$	$l_5$	$l_6$	$t_1$	$t_2$	$t_3$	$t_4$	$t_5$
I	260	220	11	11	18	13	10	3	4	3.0	13
II	300	260	13	13	20	15	12	4	5	3.5	15
III	340	300	13	13	20	16	14	4	6	4.0	15

**Note** — A complete caliper or brace requires one joint as shown in this figure and one joint made to opposite hand and as in Fig. 2.

All dimensions in millimetres.

FIG. 1 KNEE JOINT WITH LOCK FOR STEEL ORTHOPAEDIC CALIPER AND BRACES

**3. Material** — Carbon steel conforming to Designation 30 C8 or 35 C4 of IS : 1570 (Part 2)-1979 'Schedules for wrought steels: Part 2 Carbon steels (unalloyed steels) (first revision)'.

**4. Workmanship and Finish** — The male and female parts of joint shall be accurately and cleanly machined and the joint faces shall be finished clean and free from toolmarks. Fabrication by welding or brazing shall not be allowed. The male part shall have a close running fit with the female joint member. The outside surfaces of the joint and the shanks shall be free from forging scales. All sharp edges and corners shall be rounded. The component shall be free from surface flaws and cracks. The ring catch shall have a close sliding fit on the rectangular section of the female joint member. There shall not be any frictional, jerky or mediolateral movements at the joints.

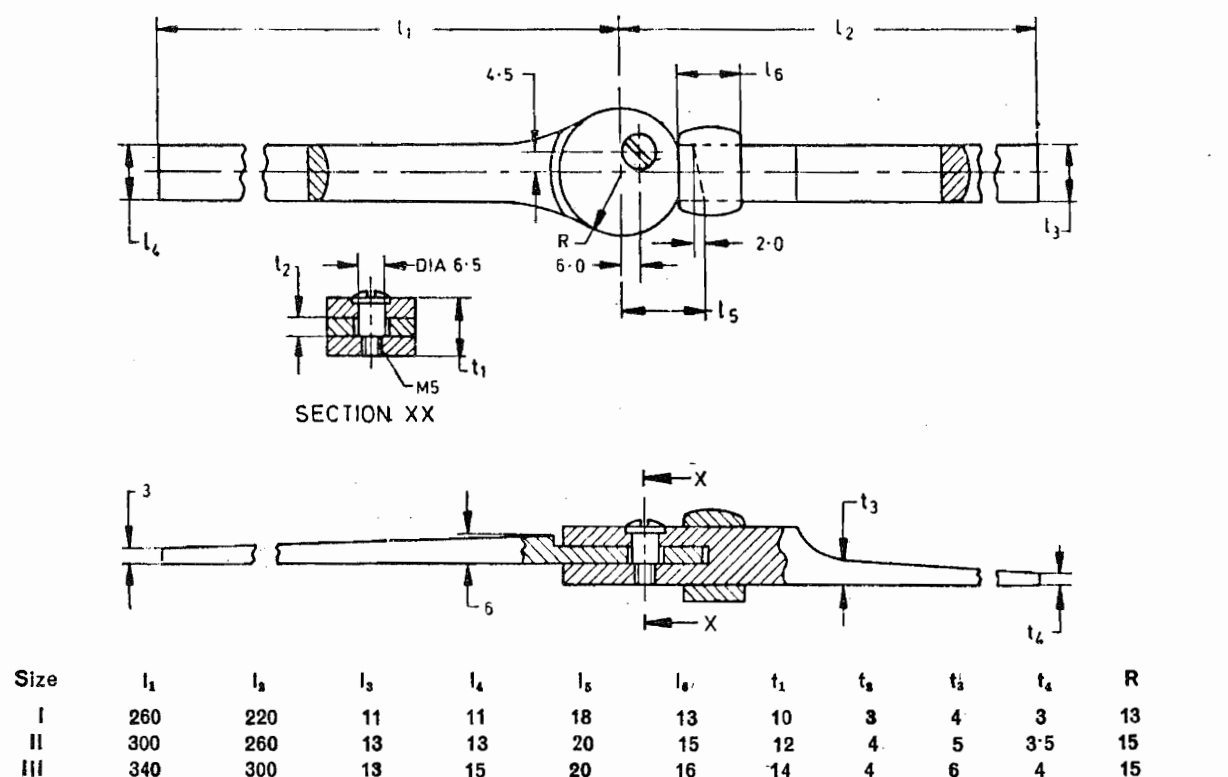
**5. Marking** — The joint shall be marked with the following:

- Manufacturer's name, initials or recognized trade-mark, and
- Size of the joint.

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Note — A complete caliper or brace requires one joint as shown in this figure and one joint made to opposite hand and as in Fig. 1.

All dimensions in millimetres.

FIG. 2 KNEE JOINT WITH LOCK FOR STEEL ORTHOPAEDIC CALIPER AND BRACES

**5.1 ISI Certification Marking** — Details available with the Indian Standards Institution.

**6. Packing** — As agreed to between the purchaser and the supplier.

**7. Sampling** — A sampling scheme and criteria for acceptance shall be as agreed to between the purchaser and the manufacturer. However, a recommended scheme is given below.

**7.1 Lot** — All the sets of knee joints of the same type shall be grouped together to constitute a lot. Each lot shall be tested for the requirements of this specification.

**7.2** Each set of knee joint with lock for orthosis shall be examined for shape and dimensions (2) and workmanship and finish (4). All those sets which fail in one or more of the above requirements shall be rejected and only the satisfactory sets of joints shall be accepted.

## EXPLANATORY NOTE

In this revision, the main changes are in Fig. 1 and 2 and dimensions.